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# Accepted Manuscript

Memory distrust syndrome, confabulation and false confession

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**Memory distrust syndrome, confabulation and false confession**

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Declaration: At the time of the Gudmundur and Geirfinnur criminal investigation in 1976, Gisli Gudjonsson was a detective with the Reykjavik Criminal Investigation Police and was also at the time conducting research into the effectiveness of lie detector tests for an MSc dissertation in Clinical Psychology.

*Abstract*

There are three types of false confessions: 'voluntary', 'pressured-compliant' and 'pressured-internalized'. On the basis of case studies, in the early 1980s Gudjonsson and MacKeith coined the term 'memory distrust syndrome' to describe a condition where people develop profound distrust of their memory and become susceptible to relying on external cues and suggestions from others. Memory distrust can, under certain circumstances, lead to a false confession, particularly of the pressured-internalized type, described as 'confabulation'. This article reviews the evidence for the condition and the psychological mechanism and processes involved. A heuristic model is then presented of a 32 year old man who falsely confessed to murder whilst in police custody. The key elements of the model involve the impact of 'contextual risk factors' (i.e. isolation, long and persistent guilt presumptive interrogation, and high emotional intensity) on 'enduring' vulnerability and 'acute state' factors. The detainee had kept a detailed diary whilst in solitary confinement that provided a unique insight into the gradual development of a memory distrust syndrome, his mental state, and thinking process. This type of false confession is apparently quite rare, but it can occur in intellectually able and educated individuals and involves 'delayed' rather than 'immediate' suggestibility.

Key words: Memory distrust syndrome, source monitoring, confabulation, delayed suggestibility

## 1.0. *Introduction*

“At a particular time I had become so confused that I seriously contemplated whether I had got mixed up in some case, or been a witness to some dreadful event and become so shocked that I could not recall precisely what had happened. My belief in criminal justice was so strong that I was beginning to believe that I was even guilty because I had been kept in custody so long” (Karlsson, 1994, p. 96).

This was the account given by Einar Bollason, a well educated man and an excellent basketball player, who in January 1976 had been wrongly implicated in a notorious murder in Iceland. He was detained in solitary confinement for 105 days before he was released from custody. His account of his experience gives a fascinating insight into the mechanism of a memory distrust syndrome that can lead to a false confession and confabulation. After a week in custody Mr Bollason was about to break down but decided to devise a system of activities for getting through each day. This involved his taking a bath in the custody suite every day and for as long as he could; he read all books available to him in custody; physically exercised in his small cell three times a day; and prayed to God. It worked. Mr Bollason was a resourceful man and it stopped him making a false confession, but according to his own account he was left traumatised by the experience for years to come. The case brings into focus the vulnerabilities of people, even strong and healthy individuals, to seriously doubt their memory under certain interrogative and custodial conditions, which could result in result in a false confession and a heavy prison sentence.

The issues raised by this case are how contextual ‘risk factors’, such as isolation and guilt presumptive interrogation can lead to a failure to invoke ‘distinctiveness heuristic’ (Schacter, 2007), breakdown in source monitoring (Johnson, Hashtroudi, & Lindsay, 1993), and a false confession (Gudjonsson, 2003a; Gudjonsson, Kopelman, & MacKeith, 1999). The case also

raises an important question. Does the detainee have the psychological resources to effectively challenge and mitigate the memory distrust and prevent a false confession occurring?

The main aim of this article is to review the research and anecdotal evidence of false confessions involving memory distrust and confabulation. The focus is on the contextual and psychological factors that precipitate doubts in the detainee's memory, cause source (misattribution) errors, confabulation and false confession. The article will provide a detailed account of a real life case where the detainee had kept a diary of his period in custody, uniquely demonstrating the gradual and subtle development of memory distrust syndrome, confabulation, false confession, and the psychological processes involved. This detainee, referred to as GS, was a suspect in the same case as Einar Bollason, but he did not have the psychological resources or resilience to effectively mitigate his memory distrust.

## *2.0. Memory distrust syndrome, confabulation, and false confession*

*2.1. Memory distrust syndrome.* In September 1981, Gisli Gudjonsson and James MacKeith presented a paper on false confessions and psychological effects of interrogation at an International Conference in Stockholm based on real life cases (Gudjonsson & MacKeith, 1982). The participants at the Conference were sceptical about false confessions in the absence of severe mental disorder. This scepticism about false confessions remained among the English legal establishment until the release of the Guildford Four in 1989 and attitudes have improved from then till the present day through a series of legal judgements focusing on police interviewing and psychological vulnerabilities (Gudjonsson, 2003a, 2003b, 2006, 2010, 2012, 2014).

At the Stockholm Conference Gudjonsson and MacKeith introduced the concept of 'Memory Distrust Syndrome' (MDS; Gudjonsson & MacKeith, 1982), which has become embedded

into the scientific literature (Gudjonsson, 2003a). MDS is described as “A condition where people develop profound distrust of their memory recollections, as a result of which they are particularly susceptible to relying on external cues and suggestions” (Gudjonsson, 2003a, p. 196). This may occur when suspects’ memory of their alibi and innocence is undermined by police during interrogation and they come to believe that perhaps they have committed the offence but have no real recollection of it.

2.2. *Confabulation*. According to Kopelman (2010), “Confabulation broadly refers to false or erroneous memories arising in the context of neurological disease. The memories may be “either false in themselves or ‘real’ memories jumbled in temporal context and retrieved inappropriately” (p. 15). Kopelman (1999) has described instances in which false memory, including false confessions can arise without overt neurological damage.

Kopelman (1987) provides some evidence for the distinction between ‘spontaneous confabulation’, which is rare and may have an organic basis, and ‘provoked confabulation’, which is more common and usually temporary. According to Kopelman, ‘provoked confabulation’ “resembles the errors produced by healthy subjects and at prolonged retention intervals, and may represent a normal response to a faulty memory” (p. 1486). ‘Provoked confabulation’ appears to be particularly relevant to cases of false confession resulting from the development of a memory distrust syndrome (Gudjonsson, 2003a, Gudjonsson et al. 1999). According to Kopelman (2010), provoked confabulation “appears to result from a ‘normal’ response to a ‘weak’ memory trace” (p. 32).

Within the context of interrogation, Gudjonsson (2003a) defines confabulation as “problems in memory processing where people replace gaps in their memory with imaginary experiences that they believe to be true” (p. 364). The confabulations in cases of false

confessions typically do not arise in the context of neurological disease, but are due to subtle psychological processes in situations of high emotional intensity (Gudjonsson, Sigurdsson, Sigurdardottir, Steinthorsson, & Sigurdardottir, 2014).

Within the author's conceptual framework in relation to cases of false confession, confabulation occurs once the detainee begins to internalise the belief that he/she was involved in the material event (offence) and then tries to reconstruct what he/she supposes took place. Gudjonsson (2003a, Chapter 23) has described this process in relation to a false confession caused by a memory distrust syndrome in a highly intelligent Norwegian man.

*2.3. False confession.* The most stringent criterion for defining a false confession occurs when the person confesses to a crime of which he or she is completely innocent (Gudjonsson, 2003a). In real life cases, full certainty of innocence is difficult to achieve without DNA or other forensic evidence exonerating the false confessor and, hopefully identifying the real culprit.

However, there is one circumstance when a confession may be considered false on psychological grounds. This happens when the confession is not based on actual knowledge or memory of the facts (Gudjonsson, 2003a; Ofshe, 1989). This is the essence of the definition used in this article.

Ofshe and Leo (1997) and Leo and Ofshe (1998) make a distinction between the initial admission ('I did it') and the 'post-admission narrative' that follows the admission. Confabulation is particularly relevant to production of the 'post-admission narrative' during a reconstruction process (Gudjonsson et al. 2014), but it could be argued that it also forms a part of the process that leads up to the initial admission (Gudjonsson, 2003a).



It is generally accepted that false confessions can be conceptualised psychologically into three main groups (Kassin & Wrightsman, 1985):

1. Voluntary false confessions (i.e. there is no apparent police pressure to confess). This type of false confession is often motivated by perception of some psychological or instrumental gain, such as attention or notoriety, for the sake of revenge, need for punishment, taking on a case for another person, or break down in reality monitoring (i.e. an inability to distinguish fantasy or imagination from reality, poor source monitoring).
2. Coerced-compliant false confessions (i.e. the false confessor gives in to pressure, being unable to cope satisfactorily with pressure from others and tries to escape from it by giving a false confession, knowing that it is false).
3. Coerced-internalized false confessions (i.e. due to external pressure and the person is persuaded that he or she has committed a crime of which he or she is innocent, but typically the person has no clear memory recollection of committing the crime but accepts having done it). This type of false confession is closely linked to the conceptualisation of the 'memory distrust syndrome' (Gudjonsson, 2003a).

Gudjonsson (2003a) suggests that the word 'coerced' should be replaced with the word 'pressured', which is psychologically more meaningful and less legally restrictive. Ofshe and Leo (1997) have also provided a helpful conceptualization of false confessions and analysed real life cases.

False confessions arising from a memory distrust syndrome are linked to source monitoring errors (Kopelman, 1999) and may arise in both voluntary and coerced-internalized false confessions (Gudjonsson, 2003a; Gudjonsson et al. 1999).

False confessions to crimes are now well document in the literature (Drizin & Leo, 2004; Garrett, 2011; Gudjonsson, 2003a, Gudjonsson et al. 2014; Gudjonsson et. al. 2015; Kassin & Gudjonsson, 2004, Kassin et al. 2010).

### 3.0. *Suggestibility, compliance and confabulation*

Gudjonsson et al. (2014) reviewed the evidence for the importance of suggestibility and compliance in relation to memory distrust and internalized false confessions. The evidence is mainly based on anecdotal case histories (Gudjonsson, 2003a; Sigurdsson & Gudjonsson, 1996), but laboratory evidence has emerged to validate the application of the concept in relation to suggestibility, compliance, and false confessions (Blair, 2007; Redlich & Goodman, 2003; Thorley, 2013; Van Bergen, Jelicic, & Merckelbach, 2009). However, contradictory findings have been reported (Blair, 2007; Horselenberg et al., 2006; Van Bergen, 2011). Anecdotal evidence suggests that proneness to fantasy or confabulation is associated with internalized false confessions (Gudjonsson, 2003a) and there is also experimental evidence to support this proposition (Horselenberg et al., 2006).

Memory distrust and suggestibility have both trait and state like features. A high trait of either memory distrust or suggestibility makes people potentially vulnerable to pressured internalized false confessions, but this does not exclude the possibility that such confessions can be elicited in the absence of trait vulnerabilities. In real life cases a false confession to a serious crime typically occurs due to a combination of background (e.g., pressure on police to solve the case, the relationship between the victim and the suspect, relationship between

suspects), contextual (e.g., the nature and seriousness of the case, nature and duration of interrogation and custody), health, personality and lack of support factors (Gudjonsson, 2003a).

A suspect may enter the interrogation with pre-existing distrust of their memory, which may be manipulated by the interrogator to induce state memory distrust, or the memory distrust may be entirely induced during the interrogation and confinement (i.e. state dependent). In either case, the interrogation would typically involve challenging the suspect's existing memory of innocence (e.g. alibi), providing a plausible explanation of why the event was apparently forgotten (e.g. due to substance misuse, history of memory problems, previous dissociation experiences, or history of depression), wondering if he or she committed the offence ("Perhaps I did do it"), getting him or her to make a full ("I did it") or a tentative ("I may have done it", "I could have done it") admission, leading to a full admission ("I did it"). Once the admission has been obtained the police may assist the suspect in generating a plausible crime related scenario and a mental image of what may have taken place, which in turn becomes his or her confession (Gudjonsson, 2003a).

When reviewing the evidence of a relationship between suggestibility and memory distrust, it is important to distinguish between 'immediate' and 'delayed' suggestibility (Ridley & Gudjonsson, 2013). Immediate suggestibility refers to the immediate effects of leading questions and interrogative pressure and is generally measured by the Gudjonsson Suggestibility Scales (GSS 1 and GSS 2; Gudjonsson, 1984, 1987, 1997). In contrast, delayed suggestibility refers to the extent to which the person incorporates misleading post-event information into their subsequent recollection, typically labeled 'misinformation' effects, and follows the experimental paradigm of Loftus, Miller and Burns (1978). It generally follows a

three-stage misinformation paradigm (Chrobak & Zaragoza, 2013; Ridley & Gudjonsson, 2013): (1) witnessing an event, (2) exposure to misleading post-event information, and (3) a delayed test to see if the misleading post-event information presented earlier leads to a suggestible response. Unlike immediate suggestibility it is measured in a subsequent test to that of the initial suggestion (Chrobak & Zaragoza, 2013; Lee, 2004; Loftus, 1979). The central cognitive mechanism that appears to drive both immediate and delayed suggestibility is faulty 'discrepancy detection' (Gudjonsson, 2003a; Schooler & Loftus, 1986), also known as a 'source monitoring' error (Chrobak & Zaragoza, 2013; Johnson et al. 1993).

There is a poor relationship between immediate and delayed suggestibility (Vagni, Maiorano, Pajardi, & Gudjonsson, 2015). Furthermore, unlike immediate suggestibility, delayed suggestibility is not related to the original memory trace of the event or the age of the child (range 7-16).

Delayed suggestibility appears more related to the memory distrust syndrome than immediate suggestibility (Gudjonsson et al. 2014), although anecdotally lack of effective source monitoring on the GSS, indicated by vague, hesitant and disproportionate number of 'don't know' replies to the leading questions, have been noted in cases of memory distrust (Gudjonsson, 2003a). This vulnerability is particularly high in people who have been diagnosed with Attention Deficit Hyperactivity Disorder (Gudjonsson, Young, & Branham, 2007).

The work of Ofshe (1989) and Van Bergen et al. (2009) suggests that compliance may also play an important role in the development of memory distrust. The mechanism may involve

highly compliant suspects co-operating more with the police and their lacking sufficient confidence to invoke ‘distinctiveness heuristic’ and challenge police suggestions.

#### 4.0. *A heuristic model*

Gudjonsson et al (2014) provides a heuristic model of memory distrust that describes the antecedents and processes involved in producing internalized false confessions. The ‘Context’ provides the potential ‘trigger’ for altering suspects’ belief systems regarding the alleged offence. These are social isolation, persuasive interrogation and high emotional intensity. The three triggers feed directly into the suspect’s cognitive appraisal of the situation and are best viewed as contextual ‘risk factors’. These contextual factors do not inevitably lead to a false confession, but they are important pre-requisites for pressured internalized false confessions to occur.

Whether or not the contextual factors elicit a pressured internalized false confession will depend on the nature, duration and intensity of the custodial confinement and interrogation, the effects of which are mediated by two sets of vulnerability factors: enduring characteristics (i.e., a history of memory problems, memory distrust, fantasy/confabulation proneness, high suggestibility and compliance) and an acute state generated by the contextual trigger factors (i.e., state memory distrust, state suggestibility). The memory distrust, suggestibility, compliance and fantasy proneness lead to failure to evoke or maintain distinctiveness heuristic, leading the suspect to contemplate the possibility that he/she might possibly have been involved in the offence (plausibility), gradually partially or fully accepting it (acceptance), and then the police will provide assistance in reconstructing what supposedly took place (reconstruction).

Full episodic false memories of committing a crime have been reported in real life cases (Gudjonsson, 2003a) and in a controlled experimental setting (Shaw & Porter, 2015).

Gudjonsson et al. (2014), outline five sequential steps concerning how this happens:

*A trigger.* False beliefs are usually provoked by something people see, hear, are told or dream about. In one case the trigger was a confrontation by police about errors in a persons' memory, followed by a nightmare that he might be involved (Gudjonsson et al. 1999).

*Plausibility.* It is perceived as it could have happened. The threshold for a plausibility shift can be quite low for it to be accepted and incorporated into memory (Mazzoni, Loftus, & Kirsch, 2001).

*Acceptance that the event may have happened.* After contemplating the plausibility that the material event occurred, unless distinctiveness heuristic is successfully activated, source monitoring errors occur and the witness or accused accepts that the event happened. The more plausible the accusation the more likely the accused is to internalize it and give a false confession (Horselenberg et al. 2006).

*Reconstruction.* Once acceptance has set in, the person then tries to make sense of it by constructing in their imagination what could or may have happened. This reconstruction may be assisted by information provided by police, co-accused, or what the individual has heard or read about the case (Gudjonsson et al. 2014).

*Resolution.* When does the person realise that he or she has had a false memory and given a false confession? In some instances the person may continue to believe it for a long time and

usually the resolution is associated with: (a) the person was in a confusional state and once the pressure is off and they have had time to think constructively their true memory comes back (Gudjonsson, 2003a); or (b) the person goes through the evidence in the case and realises he/she had nothing to do with the offence – it triggers their true memory to come back (Gudjonsson et al. 2014).

### 5.0. *The Reykjavik Confessions*

The Reykjavik Confessions involved the disappearance of two men, Gudmundur Einarsson and Geirfinnur Einarsson, on the 27 January and 19 November 1974, respectively ([http://www.bbc.co.uk/news/special/2014/newsspec\\_7617/index.html](http://www.bbc.co.uk/news/special/2014/newsspec_7617/index.html)). The men or their remains were never found but six people were convicted in connection with the alleged murders of the two men, almost entirely on the basis of their confessions, and served prison sentences. All had made confessions and subsequently proclaimed their innocence. During the investigation between 1975 and 1977, the six suspects, five men (SMC, KVV, TRL, GS, and AS) and one woman (EB) were kept in solitary confinement between 87 and 655 days and interrogated between 17 and 340 hours (Gudjonsson et al. 2014). Four other suspects, including Einar Bollason, were released from custody after not making a confession. They were not interrogated to the same extent as the other suspects and had more access to their lawyers (Jónasson, 1996; Karlsson, 1994).

In the autumn of 2011 Iceland's Minister of the Interior set up a Working Group to investigate the reliability of the confessions and it concluded in March 2013 that the confessions of the six convicted persons were wholly unreliable (Skýrsla starfshóps um Gudmundar – og Geirfinnsmál til innanríksráðherra, 2013). The current author was appointed as an expert to the Working Group. A detailed psychological analysis of the case suggested that five out of the six convicted persons may have suffered from a memory distrust

syndrome that was instrumental in their confessions. Two of the convicted persons (TRL and GS) had kept a diary during their detention that gave insight into their thinking processes and mental state relevant to their confessions. GS's diary provides a unique insight into the factors and processes associated with the development and maintenance of memory distrust syndrome in relation to the Geirfinnur case.

The purpose of this section is to provide a detailed analysis of GS's memory distrust syndrome, confabulation, and false confession within Gudjonsson et al.'s (2014) heuristic model. The evaluation is based on reading all relevant documents in the case, including police interview statements, custody records, the pre-trial psychological/psychiatric evaluation, trial and appeal court findings, GS's diary, and the author interviewing GS in February 2012 and August 2015.

### 5.1. *GS's background*

GS was 32 years of age at the time of his arrest on 12 November 1976. He was brought up by his maternal grandparents in the north part of Iceland. He was the oldest of seven children. His father was a practising Minister of Religion and died in a road traffic accident on 5 July 1974. GS was academically bright and in 1966 went to university to study theology, but dropped out of university. In the late 1960s and early 1970s he worked as a teacher. He married in the summer of 1967 and within two months he and his wife had a daughter.

In 1972 he went to study social sciences at university, but did not complete his studies. He left university in the spring of 1974 and his functioning began to deteriorate. He became preoccupied with politics, and became hyperactive, unpredictable and irresponsible. He was now keeping company with SCM, who in January 1976 became a prime suspect in the disappearance of Geirfinnur Einarsson. GS's wife was concerned about her husband's mental health in the spring of 1974, but GS refused to see a psychiatrist. After GS's father's sudden



death in July 1974, GS's mental state deteriorated further, from his description of his symptoms he was apparently depressed (i.e. lack of interest in life, poor drive and motivation, and had no sense of purpose or direction), his marriage was in serious difficulties, there were financial problems, and he was not functioning well at work. The couple separated in the summer of 1975. Later that year GS travelled in Europe, part of the time with his wife, and then met up with SMC in Paris who persuaded him to smuggle hash into Iceland in his car. GS returned to Iceland at the end of November 1975 and was arrested two weeks later after the drugs were discovered in his car arriving by ship from Rotterdam. He was detained in custody for five days. According to his wife, who was interviewed as a part of GS's psychiatric examination in 1977, GS had difficulties coping with the solitary confinement in 1975 and felt frightened and depressed afterwards. Ten days before his arrest for the smuggling offence, his son was born.

GS's mental state appeared to deteriorate further during the spring of 1976 and at the request of his mother he saw a doctor, who found him hyperactive and unrealistic. The doctor offered him an admission to a psychiatry ward, but GS declined. According to GS at the time, he could talk continuously for 24 hours without a break. His brother, who was a doctor, examined GS and prescribed him Chlorpromazine, which GS took irregularly.

A psychological and psychiatric evaluation of GS in 1976 and 1977 concluded that he was highly intelligent, introverted, sensitive, proud, dependent, and impulsive. He had poor self-esteem, and possessed vivid imagination and unrealistic ambition. He was also described as having a manic-depressive disorder, which at times made him hyperactive, highly imaginative, and prone to anger and sleep disturbance.

When interviewing GS in 2015, the author asked GS to describe his personality and behaviour prior to his arrest in 1976. He described himself as 'lazy', 'avoidant', 'carefree',

‘easily bored’, ‘gave in easily to people’, had ‘no stamina or strength’, and ‘drifted a lot’. He described a man with low self-esteem, who had lost his focus in life. He said that these characteristics developed in his late teens, but before that he was more able to focus on his studies and had had greater interest in life.

### *5.2. The arrest and custody*

The police first interviewed GS about the Geirfinnur case in February 1976, and again in May 1976 when he gave a witness statement. He was interviewed because he knew the key suspect (SMC) in the Geirfinnur case who had been in police custody since December 1975. GS denied any special knowledge about the case. On 28 October 1976 SMC implicated GS in the case and GS was arrested on 12 November and taken into custody where he remained in solitary confinement for 412 days during which time he was questioned by police on 75 occasions for a total of 160 hours. On 12 November 1976 four policemen went to his home to arrest him very early in the morning. He was interrogated between 07:25 and 13:10 and when told he was a suspect in the Geirfinnur case and stated that he had no knowledge of the disappearance of Geirfinnur Einarsson.

The following day, and whilst detained in solitary confinement, GS was interviewed in German by Karl Schütz through an interpreter, and an Icelandic detective. Schütz, a retired senior German police officer, had been brought in by the Icelandic authorities to sort out the suspects’ confessions so the case could proceed to trial. GS again denied any involvement in the case. He was extensively interviewed on 15 and 16 November and still denied his involvement. He continued to be interrogated and on 23 November, on the 11<sup>th</sup> day in solitary confinement his resistance was beginning to break down. When asked directly if he was involved in the case, GS said that as far as he knew was not, but he could not be sure. This was the first indication from the police records that GS was beginning to accept the

possibility that perhaps he was involved but could not recall it. By this time he had been interrogated for about 25 hours. The interrogations continued and on 28 November, having been in solitary confinement for just over two weeks, he gave his first self-incriminating admission during a trip with the investigators to the alleged crime scene in Keflavik. He described in vague terms the car journey to Keflavik on the day of Geirfinnur's disappearance in 1974, but could not recall any altercation there with Geirfinnur. When asked why he could not recall such an important event GS explained that he became depressed following the death of his father on 5 July 1974. The interrogation continued and on 8 December he told the investigators:

"I intend to tell the truth in this case to the best of my recollection. Some aspects of the case are unclear in my memory, but may come to me later".

On this day GS admitted that he had been involved with other men (SMC and KVV) in attacking Geirfinnur that resulted in his death in the Keflavik Slipway. This was the account accepted both by the District Court and Supreme Court and used as the foundation for convicting the three men. Subsequent interrogations focused on trying to locate Geirfinnur's body, but all locations GS only identified as 'possibilities' (i.e. he had no actual recollection of what happened to the body and was guessing possible locations).

GS did not retract his confession until 1996 and this was reported in Iceland's largest national newspaper, Morgunbladid. The current author asked GS why he had not retracted the confession earlier. He said that until he began to read the court papers after his conviction in December 1977, and noticed that there was no evidence against him apart from his confession, he thought he was involved in Geirfinnur's murder, but this was not with full conviction. In fact, he always remained unsure about his involvement in the case and never had a clear memory of the event taking place (i.e. when interviewed in 2012 he said that at the time of making the

confession he was 50% sure of being involved). When the case went to the Supreme Court for appeal in February 1980 GS was beginning to seriously doubt his involvement in the case but he did not think retracting his confession would make any difference (i.e. nobody would believe him).

### 5.3. *The lie detection*

The lie detector test took place on 31 December 1976. By that time GS had been in custody for 50 days. The reason for this test is that GS had problems remembering what had happened to Geirfinnur in the Keflavik Slipway and had been unable to help the police find the body. The investigative judge in the case Birgir Thormar and the police thought that a lie detector test might help him focus his mind and it did, but not in the direction they wanted.

The records show that there had been a major change in GS's demeanour immediately after the lie detector test on 31 December (Karl Schütz's progress report, dated 7 January 1997):

"Whereas until 30.12 he reported – reluctantly, admittedly, but still coherently and in a way that corresponded to the statements of his 'accomplices' on the events in Keflavik – he suddenly declared to the interrogators of the Reykjavik Task Force on 31.12. that he didn't really know exactly if he had been in Keflavik or not" and was considering retracting his confession (i.e. "First of all I must now think about everything. Should I perhaps take back everything that I have said?").

Police reports show that after the lie detector test attempts were made to try to 'consolidate the confessions'. On 10 January GS refused to sign the statement taken from him. He had become less co-operative after the lie detector test, but his temporary resistance was soon broken down again and he remained in a 'confession mode' until trial.

### 5.4. *The diary*

GS kept a detailed diary of key events and his experiences whilst in solitary confinement in 1976 and 1977. The existence of the diary was not known until November 2011 when he mentioned it during an interview with the Minister's Working Group. There is no reference to the diary in the Court papers and GS had kept them safe after he was released from his 12 year prison sentence. Remarkably, either the investigators did not know of its existence or chose not to interfere. It seems from the case papers that GS was treated with more respect than the other suspects in the Geirfinnur case and appeared to be seen as a crucial witness against the other suspects.

The first diary entry is dated 16 November 1974, four days after his arrest. The last entry is 27 December 1977, three days before he was sent to Kviabryggja Prison to serve his 12 years prison sentence, which was an open prison (GS was the only convicted person in the case to be sent to this open prison).

The key relevant extracts from the diary during the period 18 November and 31 December 1976 are as follows:

18.11.1976: "I had a panic attack last night. Sometimes I feel guilty but I cannot remember what has happened. This waiting is so difficult and I think about all the people who care about and have cared about me. I must be ill and have been for a long time. This is mental illness. My will is lacking all strength."

22.11.1976: "For two years I have had the belief that I did not know anything about this case but now I am supposed to have been very much involved. [...] What game is God playing with me? Am I mentally ill, or have been? I would admit to that. Many of the things I have done in the recent years was madness."

23.11.1976: "The nights are the worst. I wait desperately to fall asleep but it is slow in coming and I have intrusive thoughts [...] If I only knew if I participated in this or not. I deceive people that's the way it is. I am always acting, I am an ill man."

25.11.1976: "Grétar [Detective Grétar Saemundsson] came and implied many things and thinks I'm in a bad position in the case. He even wants me to get used to the thought of being a murderer. I find that a bit much."

26.11.1976: "I have completed 11 pages on the relationship between Saevar and I and a horrible description from my point of view [...] I should have been dead a long time ago. It would have been better than this, particularly if I'm involved in the Geirfinnur case, although I don't know how [...] Grétar has been and said I was in a bad position regarding the case."

28.11.1976: "I see no reason why I should not try to remember the case to the best of my abilities. It's a pity that I remember so little. [...] I want to solve the case right away. And receive a long and heavy sentence. I am finished."

29.11.1976: "Had a long conversation with Grétar today. I try to remember all about that trip to Keflavik. Not going too well but I am feeling better than before. I am tired after this. I wish I could remember it all better."

01.12.1976: "I did not wake up until after midday [...] I only hope that God helps me tell everything I know to be right and true."

07.12.1976: "Went for a ride with G and Eggert [...] The question is, where is the body? It is strange that it doesn't show up. [...] I feel so bad right now, I am so tired, cannot remember anything, have difficulties talking, cannot think, cannot, dread tomorrow, know that it will all be the same, don't remember, know nothing, then I will be deprived of my sanity. I am totally exhausted."

18.12.1976: “I’m always thinking about suicide, a rather ugly word suicide, know how I would do it, could not go wrong. [...] “What in the world has happened to Grétar. I have not heard from him in a long time. Doesn’t really matter but I am not entirely content, something is not right.”

22.12.1976: “Woke up lunchtime. Later Grétar came and wanted answers, which I could not give him. I then went for my dinner, ate much, and wanted to go to sleep. Then Judge Birgir arrived with a psychologist [Gisli Gudjonsson] who wants to give me a lie detector test”.

31.12.1976: “After a lot of crying, I feel better, but still I am miserable. The Voice tests [lie detector test] took place today, but I feel like I made some mistakes there. [...] I’m all breaking down and hardly recognise my name with certainty. [...] I wish God would take me to Him, I am about to give up, amnesia. Where are these bodies? How should I know? I have a headache. Feel terrible.”

#### 5.5. *Memory distrust, confabulation, and false confession*

Figure 1 provides a heuristic model of memory distrust that describes the antecedents and processes involved in producing GS’s internalized false confession. The Context provided the ‘trigger’ for altering GS’s belief systems regarding the alleged offence. The three key components were confinement and social isolation, the investigators’ guilt presumption and persuasive interrogation, (i.e., the explicit or implicit communication from investigators about the seriousness of the GS’s predicament, them not believing his memory gaps, and the futility of his continued denials), and high emotional intensity. The high emotional intensity is well documented in GS’s diary, including his having found a way of killing himself if he felt he had no alternative. He had become confused, utterly exhausted, and had no resilience to resist the investigators’ suggestions.

These three ‘contextual’ factors triggered directly into GS’s cognitive appraisal of the situation and impacted on GS’s pre-existing vulnerabilities, labelled as “Enduring factors”: (1) high compliance, particularly his eagerness to please others, (2) low self-esteem, which was well documented, (3) great trust and respect for people in authority, and (4) vivid imagination, which made it easier for him to confabulate after he had begun to confess to involvement in Geirfinnur’s murder. His lawyer was apparently ineffective in supporting him due to him rarely being allowed to see his client alone and in private.

The contextual risk factors also activated “Acute State” factors. The key ones were: (1) GS gradually began to distrust his memory that he was not involved in the Geirfinnur case, (2) this increased his delayed suggestibility, and (3) GS had good faith in the investigators and the investigative judge Birgir Thormar and felt a sense of importance that he could possibly help solve a case that was a few weeks later described by the Minister of Justice as a “nightmare” on the Icelandic nation. After the meeting with Sheriff Jón Ísberg four days after his arrest, GS began to entertain the idea that perhaps he could help the police solve the case and this gave him a sense of self-worth. A similar internal motivation of people with low self-esteem has been reported in another case of memory distrust, unreliable confession and confabulation (Gudjonsson et al. 1999).

The activation of the Enduring and Acute State factors led to a distinctiveness heuristic and source monitoring failures. With continued guilt presumptive interrogation, within a few days GS accepted that it was ‘plausible’ that he was involved and had knowledge about Geirfinnur’s disappearance, then gradually ‘accepted’ that he probably was involved, whilst having no clear memory of his being involved. With the help of the investigators, he tried to ‘reconstruct’ what had happened, using his imagination and creativity, resulting in speculative self-incriminating statements and guess work (confabulation) regarding what had



happened to Geirfinnur and the location of his body. There was pre-existing evidence that GS had a compliant temperament and may have been vulnerable to suggestions.

GS's diary shows that after a few days in custody he began to accept the investigators' suggestion that he was involved and could provide important information to help solve the case. The uncertainty about not knowing whether or not he was involved caused him distress, which was further exacerbated by his inability to produce any tangible memories that assisted with locating Geirfinnur's body. His distress reached the point of his seriously considering committing suicide. Suggestions provided by the investigators gradually featured in his statements, giving support for the existence of delayed suggestibility after interrogation.

After the lie detector test on 31 December 1976, seven weeks into his solitary confinement, GS's belief in his involvement in the Geirfinnur case diminished and he was thinking of retracting his confession. This was met with fierce resistance by the investigators and he was brought back into a 'confession mode', which lasted until trial. The Court emphasised the fact that GS had "steadfastly stuck to his testimony" (Page 22 of Supreme Court Judgment).

The resolution to GS's belief in his innocence was a gradual process during his prison sentence and he did not retract his confession until 19 years after his conviction. At the time the author interviewed him in 2012, he stated he was now 100% convinced of his innocence and never had any clear memory of murdering Geirfinnur, but at the time of his confessions he was giving the investigators details, with their assistance that he thought might have happened, largely accepting the stories of his co-accused and the investigators' working 'hypothesis' of what had happened to Geirfinnur.

Figure 1 about here

In spite of GS's high intelligence and good educational background, there had been failures in his life, his feelings of self-worth had suffered, and there probably had been untreated periods of depression. His high level of compliance allowed SMC to manipulate him into drug smuggling in the autumn of 1975, which had devastating effects on him. His diary shows that he explained his possible involvement in the Geirfinnur case to his disturbed mental state ("Many of the things I have done in the recent years was madness"), lowering his threshold for plausibility of involvement in the case, and there appears to have been an underlying need to help the police solve the case ("I want to solve the case right away"). His memory distrust, source monitoring problem and confabulation were made worse by his determination to help solve the case and the fact that he totally engrossed himself, day and night, in trying to remember what had happened to Geirfinnur and the location of the body, even spending many days writing a 'screen play' for the investigators of what he thought had happened. Unlike Einar Bollason he was not able to devise a strategy of daily distraction activities that could mitigate his memory distrust. He did not have the psychological resources or resilience to effectively mitigate his memory distrust. According to the heuristic model, he was a passive recipient of his coercive environment. Furthermore, his 'provoked confabulation' was not temporary in that it lasted several years.

## 6.0. *Conclusions*

The concept of the memory distrust syndrome has been useful in describing cases of pressured-internalized false confession, labelled 'confabulation', but on occasions it has also been found in cases of voluntary false confessions. These cases involve source monitoring problems where people come to falsely believe, usually through low self-esteem, self-doubts about their memory and police persuasion, that they have committed a crime of which they have no independent memory. At the time they are in a confusional state, which usually resolves over time, but it may take months and even years for them to believe fully again in

their innocence. A heuristic model is useful to explain the mechanism and processes involved. The key elements of the model involve the impact of contextual 'risk factors' (i.e. isolation, long and persistent guilt presumptive interrogation, and high emotional intensity) on 'enduring' vulnerability factors and 'acute state' factors. This type of false confession can also occur in healthy, intellectually able and educated individuals and involves 'delayed' rather than 'immediate' suggestibility. Both types of suggestibility are influenced by poor source monitoring, but they differ in terms of how the interviewee processes the flawed source monitoring over time.

In cases of memory distrust syndrome, the risk of a false confession is reduced where the detainee has regular private access to his lawyer and other people independent of the police, and where they have been able to engage in constructive daily activities that help take their mind of the case.

Confabulation plays an essential part in the heuristic model presented in this paper. It occurs once the detainee begins to internalize the belief that he/she was involved in the offence and then tries to reconstruct what may have happened, often with the assistance of the police. Active imagination, compliance and suggestibility speed up the confabulation process and make it richer in content. Often these confessions are vague, given with hesitancy, and the language used is tentative. The best preventative measures are improved police interview training and practice (Gudjonsson & Pearse, 2011) and the electronic recording of all suspect's interviews that allows a close scrutiny of the process and content of the interrogation (Kassin et al. 2010).

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Figure 1. Heuristic model of GS's pressured-internalized false confession.

